STATE OF CALIFORNIA — DEPARTMENT OF FINANCE

ECONOMIC AND FISCAL IMPACT STATEMENT

(REGULATIONS AND ORDERS)

STD. 399 (REV. 12/2008)

See SAM Section 6601 - 6616 for Instructions and Code Citations

California Energy Commission Revisions to the California Building Energy Efficiency Standards (Standards) ECONOMIC IMPACT STATEMENT A. ESTIMATED PRIVATE SECTOR COST IMPACTS (include calculations and assumptions in the rulemaking record.) 1. Check the appropriate box(es) below to indicate whether this regulation: A. ESTIMATED PRIVATE SECTOR COST IMPACTS (include calculations and assumptions in the rulemaking record.) 1. Check the appropriate box(es) below to indicate whether this regulation: A. ESTIMATED PRIVATE SECTOR COST IMPACTS (include calculations and assumptions in the rulemaking record.) 1. Check the appropriate box(es) below to indicate whether this regulation: A. ESTIMATED PRIVATE SECTOR COST IMPACTS (include calculations and assumptions in the rulemaking record.) A. Impacts businesses and individuals C. Impacts individuals A. Impacts businesses and include calculations C. Impacts individuals A. Impacts california competitiveness C. Impacts individuals A. Impacts calculation competitiveness C. Impacts individuals A. Impacts calculation competitiveness C. Impacts C. Impac	DEPARTMENT NAME	CONTACT PERSON	TELEPHONE NUMBER
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D. Impacts small businesses	1. Check the appropriate box(es) below to indicate the control of	cate whether this regulation:	
c. Impacts jobs or occupations d. Impacts California competitiveness h. (cont.) (If any box in Items 1 a through g is checked, complete this Economic Impact Statement.) 2. Enter the total number of businesses impacted: 1,500 Describe the types of businesses (Include nonprofits.): Electrical contractors, mechanical contractors, mechanical engineers, and commissioning providers. Enter the number or percentage of total businesses impacted that are small businesses: 80% 3. Enter the number of businesses that will be created: 0 eliminated: 0 Explain: The certification requirement that is the scope of this regulation does not create or eliminate businesses. 4. Indicate the geographic extent of impacts: Statewide Local or regional (List areas.): 5. Enter the number of jobs created: or eliminated: 0 Describe the types of jobs or occupations impacted: Companies that provide field verification of lighting and mechanical control systems, as required by the Standards. 6. Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here? Yes No If yes, explain briefly: B. ESTIMATED COSTS (include calculations and assumptions in the rulemaking record.) 1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime? \$ \$3.750,000. a. Initial costs for a small business: \$ 500 Annual ongoing costs: \$ 0 Years: 15 Years: 15 Annual ongoing costs: \$ 0 Years: 15 Years: 15 Annual ongoing costs: \$ 0 Years: 15 Years	a. Impacts businesses and/or emp	oloyees e. Imp	poses reporting requirements
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c. Initial costs for an individual: \$ Annual ongoing costs: \$ Years:			
		religionary incomplete on a stransferring for the estimate make	
d. Describe other economic costs that may occur:			
annual reporting requirements to the Energy Commission. These costs are itemized in 3. below.			

ECONOMIC AND FISCAL IMPACT STATEMENT cont. (STD. 399, Rev. 12/2008)

try: Individuals getting certification (98%), organizations providing
over the control of t
cal business may incur to comply with these requirements. (Include the dollar
ether or not the paperwork must be submitted.): \$
No If yes, enter the annual dollar cost per housing unit: and the
and which the political and the 1800 HOTOES ETATION DEVICES.
solution of parties in the control of the control o
in the need for State regulation given the existence or absence of Federal
e construction in California.
State - Federal differences: \$
fically required by rulemaking law, but encouraged.)
benefit: Building owners will benefit from this regulation
ing features of their buildings' lighting and
Secretary Control of the Control of
goals developed by the agency based on broad statutory authority?
atewide building energy efficiency standards.
4,000,000
The state of the s
ns in the rulemaking record. Estimation of the dollar value of benefits is not
onsidered, explain why not: The only alternative that was
inesses that provide field verification of lighting and
y Efficiency Standards.
n alternative considered:
Cost: \$ 3,750,000 Cost: \$ 0
Cost: \$
stimated costs and benefits for this regulation or alternatives:
aghout the life of the buildings newly constructed and
y savings benefits will be realized every year.
Committee of the Commit
alternative if a regulation mandates the use of specific technologies or
alternative, if a regulation mandates the use of specific technologies or
tandards considered to lower compliance costs?
100

ECONOMIC AND FISCAL IMPACT STATEMENT cont. (STD. 399, Rev. 12/2008)

1. Will the estimated costs of this regulation to California business enterprises exceed \$10 million? Yes Vo (If No, skip the rest of this section.)				
	each equally as an effective alternative, or o	combination of alternatives, for which a cost-effe	ctiveness analysis was performed:	
Alternative 2:				
3. For the regulation	n, and each alternative just described, enter	r the estimated total cost and overall cost-effective	veness ratio:	
Regulation:	\$	Cost-effectiveness ratio: \$		
Alternative 1:	\$	Cost-effectiveness ratio: \$	<u> </u>	
Alternative 2:	\$		S	
	FIS	CAL IMPACT STATEMENT		
	ON LOCAL GOVERNMENT (Indicate appropriate the control of the contr	propriate boxes1 through 6 and attach calculation	ns and assumptions of fiscal impact for the current	
		in the current State Fiscal Year which		
a. is p	provided in, B	Budget Act of or Chapter	, Statutes of	
b. will	I be requested in the(FISCAL YEAR)	Governor's Budget for appropriation	n in Budget Act of	
Section 6 of	spenditures of approximately \$\frac{112,500}{\text{Article XIII B of the California Constitution a}}\$\$	and Sections 17500 et seq. of the Government C	are not reimbursable by the State pursuant to code because this regulation:	
b. imp	elements the court mandate set forth by the		2-3	
C	court in the case of	vs	<u> </u>	
- A continue	plements a mandate of the people of this St	tate expressed in their approval of Proposition N	loat the	
d. is is	ssued only in response to a specific request	t from the	e i ga pa sate	
		, ,	which is/are the only local entity(s) affected;	
e. will	l be fully financed from the	(FEES, REVENUE, ETC.)	authorized by Section	
£7 - 2g - 20 - 11		of the	Code;	
✓ f. pro	ovides for savings to each affected unit of lo	ocal government which will, at a minimum, offset	any additional costs to each such unit;	
g. cre	eates, eliminates, or changes the penalty for	r a new crime or infraction contained in		
3. Savings of	approximately \$ 120,000 annua	illy.		
4. No addition	al costs or savings because this regulation	makes only technical, non-substantive or clarify	ing changes to current law regulations.	

ECONOMIC AND FISCAL IMPACT STATEMENT cont. (STD. 399, Rev. 12/2008)

5.	No fiscal impact exists because this regulation does not affect any local entity or program.					
6.	Other.					
	B. FISCAL EFFECT ON STATE GOVERNMENT (Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.)					
1	. Additional expenditures of approximately \$ 37,500 in the current State Fiscal Year. It is antic	cipated that State agencies will:				
	a. be able to absorb these additional costs within their existing budgets and resources. b. request an increase in the currently authorized budget level for thefiscal year.					
✓ 2.	Savings of approximately $\$ \underline{ 40,000}$ in the current State Fiscal Year.					
3.	3. No fiscal impact exists because this regulation does not affect any State agency or program.					
4.	Other.					
C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS (Indicate appropriate boxes1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.)						
1	. Additional expenditures of approximately \$ in the current State Fiscal Year.					
2.	Savings of of approximately \$ in the current State Fiscal Year.					
3. No fiscal impact exists because this regulation does not affect any federally funded State agency or program.						
4. Other. The proposed regulations impact state-financed buildings but are not expected to impact federal funding of state programs.						
FISCAL	OFFICER SIGNATURE	B-24-12				
	CY SECRETARY 1 OVAL/CONCURRENCE	8/28/12				
	RTMENT OF FINANCE PROGRAM BYDGET MANAGER OVAL/CONCURRENCE	1/28/17				

The signature attests that the agency has completed the STD.399 according to the instructions in SAM sections 6601-6616, and understands the impacts of the proposed rulemaking. State boards, offices, or department not under an Agency Secretary must have the form signed by the highest ranking official in the organization.

2. Finance approval and signature is required when SAM sections 6601-6616 require completion of Fiscal Impact Statement in the STD.399.

ECONOMIC IMPACT STATEMENT - Explanations

A. ESTIMATED PRIVATE SECTOR COST IMPACTS

2. Number of businesses impacted.

The Energy Commission does not know how many individuals or businesses will choose to become certified for the purpose of completing the field verification tests (called "acceptance tests" in the Standards) that are required for several lighting control components and mechanical system components. The proposed regulations require a minimum of 1,000 lighting control acceptance test providers and 1,000 mechanical acceptance test providers be certified to perform these tests before the certification requirements in the Standards apply. The Energy Commission estimates that there at least 5,000 professionals qualified to be trained to complete the mechanical acceptance tests and 5,000 professionals qualified to be trained to complete the lighting controls acceptance tests. The Energy Commission was informed by interested stakeholders who participated in a public workshop on February 27, 2012 that some of the same individuals and businesses will choose to obtain certification on both sets of acceptance tests. There are also comments in the pre-rulemaking docket 10-BSTD-01 by the California Commissioning Collaborative indicating that building commissioning professionals are qualified to complete both the lighting controls and mechanical acceptance tests. Based on this information, the Energy Commission is assuming 1,500 for the number of businesses impacted by this proposed regulation in the first year of its implementation.

3. Number of businesses created or eliminated.

The Energy Commission does not believe that any businesses will be created or eliminated as a result of this regulation. The intent of this regulation is to certify the industry professionals (e.g. electrical and mechanical contractors, commissioning providers, controls installation and startup contractors) who are already completing the lighting controls and mechanical acceptance tests required by Title 24, Part 6. There are existing training organizations serving these industry professionals that will be approved by the Energy Commission to be Acceptance Testing Technician Certification Providers. The pre-rulemaking docket 10-BSTD-01 does not include any comments from entities seeking to create new businesses to provide training and certification services for Acceptance Test Technicians. This docket does, however, include comments from current training and certification entities that are interested in becoming Acceptance Testing Technician Certification Providers.

3. Number of jobs created or eliminated.

The Energy Commission does not believe that any jobs will be created or eliminated as a result of this regulation. The intent of this regulation is to certify the industry professionals already completing the lighting controls and mechanical acceptance tests required in Title 24, Part 6. The Energy Commission

Revisions to the California Building Energy Efficiency Standards – Certification of Field Technicians completing nonresidential acceptance testing requirements

believes that there will be new training curriculum developed and new training classed provided by existing training and certification organizations, but that this new activity will be accomplished with existing training and certification personnel.

B. ESTIMATED COSTS

1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime?

The Energy Commission expects the costs charged to individuals and businesses for acceptance test provider certification to vary considerably, depending on which organization is offering the certification and for what purposes. For example, some organizations that provide extensive professional training to contractors for the design and installation of lighting and/or mechanical systems in nonresidential buildings may choose to integrate these new certification requirements into their existing training and certification programs. Other organizations may choose to provide training and certification specific to the requirements in these proposed regulations. Still other organizations may choose to provide certification testing without offering any training, under the assumption that most professionals providing these test services already have professional training that qualifies them to prove their competence, by way of a certification test, to provide the field verification services that are the subject of these proposed regulations. The Energy Commission has assumed a cost per certification that is commensurate with a 40-hour process of training for technicians and an 8-hour process of training for technician supervisors.

C. ESTIMATED BENEFITS

3. What are the total statewide benefits from this regulation over its lifetime?

The total statewide benefit listed on the Std 399 form is \$4 million dollars. estimated by assuming that a small fraction (1/2 of a percent) of the total savings expected from the 2013 Standards update for nonresidential buildings are due to the proper installation of lighting and mechanical systems that are the subject of this proposed regulation for industry certification. This small fraction is derived from the expectation that:(1) at least half (50%) of the energy savings from the 2013 Standards will be from the installation of lighting controls and mechanical systems, the same systems that require verification through the acceptance testing that is the subject of these regulations, and (2) verifying that these systems are installed and operating properly will improve the realized energy efficiency of these systems by at least one percent (1%). Therefore, the overall benefit of these regulations is conservatively estimated by multiplying the total expected savings from the 2013 Standards by the product of 50% and 1%, which is ½%. The expectation that at least 50% of the energy savings from the 2013 Standards will come from the lighting controls and mechanical systems verified by the acceptance tests that are the subject of this certification rulemaking comes from

Revisions to the California Building Energy Efficiency Standards – Certification of Field Technicians completing nonresidential acceptance testing requirements

an Energy Commission staff review of the results from thousands of building energy simulations that were completed to estimate the entirety of energy savings from the 2013 Standards update for nonresidential buildings. This review found that greater than 50% of the energy savings are expected to accrue from the lighting controls and mechanical systems governed by the Standards, so the Energy Commission is using 50% as a conservative estimate.

The question specifies the "lifetime of the regulation" and these regulations are expected to have an extended lifetime. Staff considered and rejected interpreting the "regulation over its lifetime" to mean three to five years, which is the cycle of regular updates to the Standards, and instead opted to provide annual data. For mechanical and electrical equipment in nonresidential buildings, which is the subject of the field verification requirements of the proposed regulations, the life expectancy is assumed to be 15 years.

D, ALTERNATIVES TO THE REGULATION

4. Were performance standards considered to lower compliance costs?

Moreover these certification requirements ensure that the underlying building standards, which are also performance-based, are met.

FISCAL IMPACT STATEMENT - Explanations

A. FISCAL EFFECT ON LOCAL GOVERNMENT

2 and 3. Additional expenditures and savings

These expenditures and savings values were calculated based on an estimate that 3 percent of the total costs of nonresidential newly constructed buildings, additions and alterations to existing buildings, would apply to local government.

A. FISCAL EFFECT ON STATE GOVERNMENT

1 and 2. Additional expenditures and savings

These expenditures and savings values were calculated based on an estimate that 1 percent of the total costs of nonresidential newly constructed buildings, additions and alterations to existing buildings, would apply to state government.

DEPARTMENT OF FINANCE

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